7.1. Introduction

As digital platforms emerge as powerful engines of innovation, their role in our daily lives is increasing. New markets are delivering services that greatly improve convenience and quality of life for many.

These new markets and business models also create new challenges for regulators and government agencies. One major concern is the “winners-take-most” dynamics of many digital platform markets as a few large firms become dominant. Digital companies are now able to combine several factors and strategies to gain greater understanding of consumer psychology to influence behavior and to crowd out new potential competitors and thus shape the competitive landscape of the digital economy. Such factors include strong network effects, “multisidedness,” massive data capture, increased computational power, and use of new technologies. Given the pervasiveness of the digital economy in many aspects of our economic lives, its developments impact consumer welfare, competition policy, and the growth trajectories of countries.

1 This chapter benefited from the comments and review of Johannes Benjamin Bernabe, commissioner at the Philippine Competition Commission; James Villafuerte, senior economist at the Asian Development Bank (ADB); and Josef T. Yap, consultant at ADB.

2 This chapter was prepared as a background paper for ADB (2021).

3 Multisidedness in a platform means it accommodates more than one distinct group or type of users. The various groups are the “sides,” and the platform functions by facilitating the interaction of these different sides. For example, the entertainment platform YouTube facilitates interaction among viewers, content creators, and advertisers. The term is further elaborated in a succeeding section on multisidedness and network effects.
By and large, competition is considered welfare-enhancing for consumers in a market as it engenders lower prices, higher quality, and more choices; incentivizes innovation; and encourages productivity. In this context, several factors have shed light on the function of competition law and policy in the digital platforms market. Specifically, competition authorities are looking into the indirect network effects in multisided markets such as when the value of a platform increases as the number of users grow. Consumers may gain from the presence of a few dominant platforms instead of having several, fragmented platforms where the indirect network effects are not fully realized. These dominant platforms tend to create an integrated network of related services and conducting transactions using a single account is more convenient than having multiple accounts on different platforms. Nevertheless, standard economic doctrine suggests that highly concentrated markets with less competition often result in suboptimal outcomes.

The dominance of a few large companies in digital platform markets is evident. Globally, the “big four” (Google, Apple, Facebook, and Amazon) are household names, and in some instances have become synonymous with the services they offer, such as the case of “googling” when searching on the internet or “friending” (from Facebook) when connecting with someone on social media. In Southeast Asia, the market research firm Iprice (Iprice Group n.d.) finds that the e-commerce platforms Lazada and Shopee account for more than 55% of total visits to the top 10 e-commerce websites in the countries covered by the study (Indonesia, Malaysia, the Philippines, Singapore, and Viet Nam). In the Philippines, these two account for more than 90% of total visits to the top 10 e-commerce websites.

Recently, market leaders have started to leverage their positions in one market to penetrate adjacent markets, sometimes to the disadvantage of competitors (ADB 2021). For example, Amazon is an e-commerce platform operator that also sells its own products on the platform, and is a leading provider of cloud services through Amazon Web Services. In Southeast Asia, Grab used its market stronghold in ride hailing to enter other markets such as digital payments (GrabPay), food delivery (GrabFood), and point-to-point parcel delivery (GrabExpress).

This chapter examines the factors and strategies, challenges, and barriers to the application of competition policy in the digital platforms market. New approaches are recommended as policy makers seek to promote competition and encourage innovation, limit concentration of market power, and protect consumer welfare.
7.2. Competition Law and Policy for Digital Platforms

Competition law and policy aim to ensure and promote free markets. In principle, markets with free and fair competition are expected to deliver greater consumer welfare, encourage innovation and economic efficiency, and help create a more dynamic and growing economy. Consumers pay lower prices, get better quality, and have more choices. Market efficiency reduces the need for complicated interventions and costly regulation.

A combination of characteristics inherent in digital platforms has underscored the appropriateness of traditional competition policy tools for this market. Yet, the possible distortionary effects of these same characteristics highlight the need to rethink competition law and policy in the context of digital platforms.

7.3. Characteristics of Digital Platform Markets

Digital platforms are internet-based, multisided markets that connect user groups. Along with multisidedness, digital platforms exhibit strong network effects, enjoy significant economies of scale and scope, and have raised the value of user data (Figure 7.1). These characteristics together result in digital platform companies with significant market power and the ability to dictate the rules of the game in the market ecosystems where they operate. This raises a concern for competition policy as firms in dominant positions may engage in anti-competitive behavior that stifles innovation, and reduces consumer welfare and overall economic growth.

Multisidedness and Network Effects

Rochet and Tirole (2006) define multisided markets as those wherein platforms enable interactions between end users to get multiple sides “on board” by appropriately charging each side while attempting to make a profit. Unlike a one-sided market, where only one price level can be observed, multisided markets feature a “price structure,” or the ratio of prices between user groups, which platform operators must balance to increase the number of users. Table 7.1 provides a few examples of multisided platforms with asymmetric pricing between user types.
Table 7.1: Pricing Structure in Multisided Platforms

<table>
<thead>
<tr>
<th>Multisided Platform</th>
<th>Money Side</th>
<th>Subsidy Side</th>
<th>Typical Price on Subsidy Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video game consoles</td>
<td>Game publishers pay royalty</td>
<td>Consumers pay marginal cost or less for console</td>
<td>Below cost</td>
</tr>
<tr>
<td>Physical newspapers</td>
<td>Advertisers pay</td>
<td>Readers usually pay less than the marginal cost of printing and distribution and sometimes pay nothing</td>
<td>Below cost</td>
</tr>
<tr>
<td>Online marketplaces</td>
<td>Sellers often pay commission</td>
<td>Buyers usually do not pay</td>
<td>Free</td>
</tr>
<tr>
<td>Job recruiters and online job boards</td>
<td>Employers pay for postings or recruitment</td>
<td>Job seekers do not pay</td>
<td>Free</td>
</tr>
<tr>
<td>Search engines</td>
<td>Businesses pay for advertisements</td>
<td>Searchers do not pay</td>
<td>Free</td>
</tr>
</tbody>
</table>

Source: Evans and Schmalensee (2016).

Figure 7.1: Market Characteristics That Could Stifle Competition

- **Network effects**: Value of the platform is positively correlated with the number of users.
- **Extreme returns to scale**: Returns of producing digital goods and services are, in time, very large compared to its cost of production.
- **Data intensiveness**: Perhaps the most important byproduct of using digital platforms is the amount of data captured, e.g., targeted recommendations, behavioral nudges.
- **Switching costs**: Real or perceived costs incurred by a consumer when changing suppliers for similar goods or services.

Source: Bernabe (2020).
The dynamics of pricing in multisided platforms create difficulties in applying traditional competition tools used to measure market outcomes such as price levels. As Table 1 shows, it is not unusual for businesses to price products at zero. This asymmetric pricing can create confusion when using traditional competition policy concepts, as a zero or negative-pricing strategy could be incorrectly interpreted as anti-competitive or predatory behavior. On the money-making side, where prices may be higher than non-digital alternatives—such as commissions paid by sellers—competition analysis might again wrongly diagnose these as a signal of excessive pricing and an exercise of market power.

Multisided business models also result in strong network effects, particularly indirect effects. Network effects exist in two broad categories: direct and indirect. Direct network effects occur when the value of a platform increases with the rise in the number of users. An example is the old telephone networks where customers preferred the network where most of their contacts could be found. Notably, these telephone networks tended to encourage monopolies until regulations were implemented to promote competition through mandatory interconnection among different networks.

Indirect network effects are present when the value ascribed to a platform by one user type increases when the number of another type of user increases. This is observed in online marketplaces where a platform becomes more attractive for buyers if there are more merchants and vice versa. Another example is ride-hailing services—passengers prefer platforms with more vehicles or drivers, while drivers in turn prefer platforms with more passengers. These network effects provide immense benefits to “first-movers” who are able to quickly reach critical mass. These also, in turn, make it relatively more difficult for the newer players to establish a foothold in the market and to introduce more competition (ADB 2021). Thus, both types of network effects often cause more market concentration.

**Economies of Scale and Scope**

Economies of scale occur when a business becomes more cost-efficient as it increases the scale of its operations. Digital platforms often entail significant fixed costs in setting up but have almost negligible marginal costs in providing each additional unit of output, thus exhibiting scale economies. An additional advantage for incumbents and first-movers able to scale up their operations is their collection of massive amounts of data. Incumbent advantages are further
reinforced by the practice of integration wherein big digital platforms expand vertically or to adjacent markets, effectively suppressing competition from new and smaller players in multiple markets.

**Data Intensiveness**

The ability of platform operators to collect, analyze, and use massive amounts of data is crucial to enabling digital platforms to deliver greater value to users and ward off competition. Indeed, the way data is utilized in a digital platform economy is both a privacy and competition issue, especially when accounting for network effects.

Ezrachi and Stucke (2018) identify several market distortions from the rise of what they call “data-opolies.” One is that dominant incumbents can use their ownership and control of the flow of excessive amounts of information and data to the detriment of consumers and competitors, as the market, and consequently regulators, have yet to establish the price or value of data. This degrades product quality and increases information asymmetry, which some argue is equivalent to paying an excessive price for a product or service. Another is that control of a key platform allows exclusionary behavior, as the platform operator can push its own products and services to users and advertisers. Another distortion is negative innovation, where market leaders invent ways that harm consumers and markets, such as exploitative techniques to increase user engagement or exclude competitors. Coherent policy on data management and competition is needed to limit proliferation of these harmful market distortions.

7.4. Rethinking Competition Policy in the Context of Digital Platforms

Interventions promoting competition must be consistent with competition policy’s underlying goal to promote consumer welfare through efficient markets. Any recalibration should thus ideally avoid suppression of the value created by technological advancements, network effects, and scale economies.

Competition policy recognizes that actual competition among fragmented players may not be practical or efficient in certain markets, such as in most digital platform markets, due to network effects and scale economies. Tirole (2020) argues that contestability can be maintained by
ensuring “dynamic competition.” Due to network externalities, rather than inducing the entry of competitors, incumbents can be provoked into acting competitively by the perceived threat of entrants into the market. As long as markets are contestable, incumbents continue to offer competitively priced, high-quality, and innovative products to protect their market share against potential competitors, thus ensuring consumer welfare.

**Analysis of Mergers and Acquisitions**

Much like traditional enterprises, digital platforms compete and pursue cross-country expansion plans through mergers and acquisitions of stakes. Grab’s acquisition of the operations of Uber in Southeast Asia significantly increased the former’s share in the digital platform-based transportation service market in the region, drawing heavy regulatory scrutiny from competition authorities. The transaction saw Uber exit its operations in Southeast Asia but retain a 27.5% stake in Grab’s operation. Uber’s operations in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, and the Russian Federation were also merged with Yandex.Taxi in 2018 (Yandex.Taxi n.d.).

Larger and global players likewise employ acquisitions to either penetrate local markets inclined toward homegrown platforms or to increase local market presence. In some cases, they maintain multiple brands or labels, blurring perception of market power. When Alibaba acquired a controlling stake in Lazada in 2016 (Alibaba Group 2016), it effectively defused the power of a strong regional competitor and, together with Aliexpress, gained access to six of the largest Southeast Asian economies. Facebook’s acquisition of Instagram and WhatsApp still generates discussion on whether the traditional tools used by competition authorities are appropriate for multisided digital platforms.

Recognizing that breakups of large firms are administratively and politically costly, competition authorities need to recalibrate their merger analysis toolkit and consider other relevant economic concepts. For instance, price theory or the analytical tool used to predict prices post-merger should explicitly consider the multisided nature of digital platforms so as not to misdiagnose price movements in one side of a market as representative of the total welfare effects of a merger.
The Centre on Regulation in Europe, in its recent publication *Digital Markets and Online Platforms: New Perspectives on Regulation and Competition Law*, recommends key actions that competition authorities should consider in updating their approach to merger analysis (Kramer 2020). First, the efficiency effects of mergers should be explicitly and simultaneously analyzed with theories of harm. This recognizes the efficiency-improving effects, due to network effects, of increasing the size of firms. Second, focus should move away from actual or existing competition and shift toward analyzing potential competition and innovation capabilities. Third, focus on the “balance-of-harm” that could befall parties to the dispute, while taking into account the risks and costs of assessment and enforcement errors. Fourth, update the burden of proof in merger regulation to allow for presumptions. These presumptions can be rebutted by the parties involved with the merger, effectively reverting the burden of proof to firms instead of competition authorities. Mergers with likely welfare-enhancing effects are cleared or those with welfare-reducing effects blocked without the need for detailed and resource-intensive case analysis. Finally, to avoid analysis paralysis, consider introducing confidential divestiture plans in cases of high uncertainty so that mergers with highly ambiguous competition effects can be cleared yet allowing competition authorities to reverse the clearance if it later becomes apparent that the cleared merger has merger-specific anti-competitive effects.

Moving Beyond Enforcement through Ex Ante Policies

The dominance of a few large digital platform companies and the difficulty that government authorities have had in arresting their ever-increasing dominance has made it apparent that traditional *ex post* enforcement of competition laws may be inadequate in multisided digital platform markets with network effects. This has renewed interest in *ex ante* policies that seek to prevent anti-competitive outcomes before they happen. One *ex ante* instrument currently available to competition authorities is merger regulation, which by itself may not be enough.

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4 The “balance-of-harms” approach—as proposed in the Digital Competition Expert Panel report (Furman et al. 2019) to update the United Kingdom’s competition framework—aims to account for the scale and the likelihood of harm in merger cases in terms of potential competition and innovation. The report argues that “a more economic approach to assessing mergers would be to weigh both the likelihood and the magnitude of the impact of the merger.” This leads to “mergers being blocked when they are expected to do more harm than good”, following the balance-of-harms approach.
The adoption of rules that incentivize incumbents to behave competitively despite their advantageous positions is consistent with achieving competitive market outcomes while retaining the benefits of network effects. Instead of penalizing dominance and artificially creating a fragmented but inefficient market, *ex ante* policies that ensure contestability may be more appropriate. Figure 7.2 lists some of the policy areas where government support is crucial in promoting competition in the digital economy.

One way to ensure contestability is through “multi-homing” or by restricting exclusivity arrangements. Multi-homing means that users can join and use multiple platforms at minimal switching costs (Box 7.1). In digital platform markets where incumbents enjoy a certain degree of dominance, it may be difficult for newer players to gain enough foothold in the market to be considered an effective competitor. An example could be in ride-hailing platforms, where an incumbent can set exclusivity arrangements to lock-in their drivers. Thus, a prospective entrant, even with potentially better services...
Box 7.1: Multi-Homing and Market Dominance

“Multi-homing” refers to the ability of users and service providers to simultaneously avail of goods or services provided by multiple platforms, and possibly their corresponding complementary components. Multi-homing becomes especially pertinent in platform markets with high concentration, as a mechanism to prevent market dominance of select firms. It becomes possible for one to freely multi-home when costs to do so are low.

Chisholm and Jung (2016) particularly warn against market dominance and the inability to multi-home across platforms. As explained in the subsequent bullet points, the incumbents’ dominance may be reinforced by certain types of contractual restrictions, the constraints faced by users in moving their data to other platforms, and dominant players’ exclusive access to proprietary data, among other things.

- **Contractual restrictions.** Contractual restrictions are commonly embodied in wide-scoping most favored nation (MFN) clauses and exclusivity and tying provisions. European competition authorities work with broad MFN clauses as those that “require suppliers and retailers to publish on a price comparison tool of online marketplace the same or better price and conditions as those published on any other sales channel.” They also work with narrow causes that “require suppliers and retailers to publish on a price comparison tool or online marketplace the same or better price and conditions as those published on its own (direct) website” (Chappatte and O’Connell 2019). Transportation network companies and other platforms also have exclusivity clauses, which tend to discourage multi-homing.

- **Lack of capacity of customers to transfer existing profiles to a different competing platform.** The users facing this constraint are thus effectively locked-in, which reduces opportunities for engagement by other companies or platforms. The inability to multi-home can result in high transactions costs and disincentivize switching, in addition to large network effects.

- **Dominant players’ exclusive access to proprietary data.** Access to individual-level information, such as commonly searched items and historical transactions, advantages incumbent players in understanding consumer behavior. It allows them to better tailor advertisements and promotions to target markets. In some cases, multi-homing policies less effectively promote competition because of a firm’s overwhelming market dominance, in addition to its data advantage, as the Grab experience in ride hailing in the Philippines demonstrates.

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A common citation of the use of a wide MFN clause is in the hotel booking market, particularly the Bundeskartellamt (Federal Cartel Office) case against Booking.com in December 2015 (See: Chappatte and O’Connell 2019; Bryan Cave Leighton Paisner LLP 2019). As a result of the Federal Cartel Office’s finding, Booking.com limited its agreements with hotels to “narrow” MFN clauses, although it subsequently challenged this as well on appeal. Narrow MFN clauses prohibit hotels from offering prices and conditions better booking and cancellation conditions or terms of availability—on their own websites or through offline distribution channels more favorable than what Booking.com offered. On appeal, the Düsseldorf Higher Regional Court quashed the initial decision by the office in June 2019 because narrow MFN clauses were found to be consistent with competition law as they would permit a “fair and balanced contractual exchange of services between the portal and the hotels”. As such, Booking.com’s provision was required to subvert a “disloyal re-channeling” of portal customer bookings if the hotel were to establish more desirable prices and terms on their own online and offline media. A similar ruling was later issued by the Swedish court, bringing the jurisprudence in these countries in line with most other jurisdictions in Europe.

and terms, would find it difficult to entice enough drivers to subsequently attract more passengers. However, a more sizable passenger base generated by multi-homing will induce more drivers to service various platforms. By allowing drivers and passengers to multi-home, barriers to entry are reduced and contestability is introduced or preserved. In line with this perspective, the Philippine Competition Authority mandated Grab to engage in nonexclusive arrangements with drivers and operators when the company acquired Uber (PCC 2018).

Relatedly, interoperability is a tool that can also promote and facilitate multi-homing. Interoperability is the ease with which one system or platform integrates with another in access, exchange, and use of data (Box 7.2). For instance, ApplePay and Paypal can be used to pay for transactions in Rakuten’s e-commerce platform even if RakutenPay is also available. In some cases, transfer of funds is also possible between e-wallets from different digital payment platforms.

Authorities have previously employed the interoperability tool to address the dominance of incumbents. In the case of Microsoft, the European Commission expressed concerns about the tying of the firm’s web browser Internet Explorer to Windows, which is its largest customer product in the PC operating system market. In 2019, as part of its commitments, Microsoft agreed to establish broad interoperability information disclosures to allow interconnection between Windows and third-party products.

The use of protocol interoperability suggests the need to construct standards to guide the development of complementary services, on a merit basis, to promote competition (Crémer, de Montjoye, and Schweitzer 2019). However, enforcement of these standards must be timed with prudence so that they do not hamper and distort market conditions and impede innovation.

While ex ante tools aim to induce pro-competitive behavior of firms, another approach is to empower consumers in their interactions with digital platforms. This can be done through data access and privacy rules. The magnitude of the collection and use of data is a crucial issue, which can lead to the development of new business models that deliver more value and offer innovative products and services to consumers. But it is also a mechanism to maintain or amplify market dominance while potentially subjecting clients to privacy risks. This shows the importance of integrating the design of competition law and its implementation with the protection of consumer rights and data privacy.
Box 7.2: Interoperability of Systems

Crémer, de Montjoye, and Schweitzer (2019) identified three kinds of interoperability (Table). Protocol interoperability refers to the capacity of two types of products or services to create an interlinkage and subsequently supply complementary services. It is the concept most frequently referred to in competition policy. Data interoperability is similar to data portability, but the former offers potential real-time and continuous availability of personal or machine user data. Notably, systems that observe protocol interoperability lead to the accessibility of data, but the reverse is not true. Meanwhile, full protocol interoperability is defined as the processes and criteria which permit the interoperability of two substitutable systems.

Characteristics of the Three Types of Interoperability

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Real-World Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol interoperability</td>
<td>Ability of two services or products to fully interconnect with one another and provide complementary services. Can exist within the context of platforms.</td>
<td>Allows for the development of complementary services and competition on the quality of those services.</td>
<td>Competitive risks which arise from possible de facto standard-setting of firms required in this type of interoperability’s implementation.</td>
<td>Operating systems (platforms), online service with their complementary services, phones and charges (e.g., charging protocols).</td>
</tr>
<tr>
<td>Data interoperability</td>
<td>Roughly identical to data portability, but with continuous, potentially real-time access to personal or machine user data. Relies on privileged Application Programming Interfaces (APIs) when users authorize a service B to access existing data through service A’s API.</td>
<td>Can enable the offering of a complementary service. Allows users to avail of non-bundled services. Can promote multi-homing. Possible to reduce security risks and costs through sufficient technical and legal standards and data protection laws.</td>
<td>In the context of platforms, may require substitution of some platforms’ functionalities. Security issues, particularly ensuring that users who have agreed to data sharing, can control the subsequent use of the shared data.</td>
<td>Add-ons to platforms such as Gmail, access to vehicle data, or access to the Internet of Things data.</td>
</tr>
</tbody>
</table>

continued on next page
<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Real-World Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-World Applications</td>
<td>Can exist within the context of platforms or as a network of services complementary to one another; this type of interoperability may prompt the offering of a complementary service</td>
<td>Higher costs relative to data portability</td>
<td>May be prone to anti-competitive information exchange depending of data type and access modalities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Always requires some form of protocol interoperability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full protocol interoperability</td>
<td>Ensures two or more substitute services interoperate</td>
<td>Positive network effects can be shared among direct competitors, or decrease lock-in effects rooted from network effects, thus may possibly be an efficient instrument to address concentration</td>
<td>Must be imposed with caution</td>
<td>Messaging systems, mobile phone networks, e-mails, file formats</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Requires stronger integration and standardization, relative to protocol interoperability, across several competing platforms, which implies possible significant preclusion of a firm’s ability to innovate and differentiate the various services it provides</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Network effects for this type of interoperability depend on the number of users of all the services and the standardization is higher given that several services must all agree on a common standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Since it necessitates coordination among firms, it may lead to collusive behavior</td>
<td></td>
</tr>
</tbody>
</table>

Source: Crémer, de Montjoye, and Schweitzer (2019).
Generally, in promoting competition in digital platforms, consumers need to be empowered with control over their data generated through their digital activities. When data privacy rules are enforced, consumers can trust the market with their data. Consumers will face lower switching costs, and entry of new businesses is eased as they can now access, with their consent, the data being held by dominant incumbents.

Asian economies are following the European Union (EU) model in this respect. Blackmore (2019) observes that while the direction and priorities differ across jurisdictions in Asia and the Pacific economies, a “consistent strengthening of data protection laws throughout the region” is occurring following the EU’s General Data Protection Regulation (GDPR) standards. However, the strengthening of consumer protection and data privacy rules has also increased the operating costs of firms, which could dampen competition.

Finally, competition authorities will need to figure out how to handle “walled gardens” in digital platform markets (Box 7.3). A small number of firms have now become dominant, managing multiple powerful platforms and acting as “gatekeepers” in the digital economy. The concept of walled gardens describes an ecosystem where dominant incumbents, such as monopolies, duopolies, and oligopolies, control several aspects of a platform system. As a closed structure, it walls in current and potential users because these incumbent-operated platforms already have a large existing consumer base. Primarily, consumers suffer within the walled gardens as they inhibit consumers moving to alternative platforms due to high switching costs. In the same vein, such “walling” precludes entry of new players who may introduce better-quality products, more innovation, and business models that could improve consumer experience. While this ecosystem prevails, not only are users “locked in” and potential competitors “locked out” of the walled garden, but the advancement of technologies and business models also suffer slower growth or even stagnation.

**Competition Policy and Cooperation**

In enforcing *ex ante* regulation, competition authorities cannot operate in a vacuum. They will need to cooperate with other policy-setting and regulatory agencies to make sure that rules and regulations complement each other (Figure 7.3). While competition authorities hold the main responsibility for promoting market competition, digital platforms have a unique and complex set of characteristics that requires a multifaceted approach. An example of the
Box 7.3: GCash Walled Garden

Presently, GCash is the biggest digital money and electronic wallet platform in the Philippines.\(^a\) The volume of registrations on the app doubled between April and June of 2020 (during the coronavirus pandemic),\(^b\) while transactions rose by 700% year-on-year in May 2020,\(^c\) primarily from bank cash-ins and online bills payment.\(^d\) Aside from these unprecedented figures, GCash has become the number one downloaded app on both Android and iOS app stores consequently strengthening its leadership position also in terms of app penetration.

The user data that GCash collects include mobile numbers, location, bank account numbers, transaction details, and know-your-customer information, as required by the Bangko Sentral ng Pilipinas, the central bank. Such confidential data and information are kept by GCash and are not shared with other actors on the platform, such as banks and merchants, despite being connected through payment systems like InstaPay and PESONet. While these are not yet directly monetized by GCash, the massive consumer data at their disposal allow them to introduce other tailored products in their platform, such as a short-term credit line through GCash partner banks.

Data monetization may not also necessarily entail disposal or transfer of raw user data. In the case of GCash, its GScore feature, which produces user credit scores based on the data collected by and stored in the system, is identified as a possible mode to go about the monetization process. While already aggregated, these user credit scores can arguably still be valuable to institutions involved in credit intermediation and related activities.

\(^a\) GCash regards itself as a lifestyle and financial app offering a full suite of various services such as buying load, paying bills and lifestyle payments, and sending money and/or local and global remittances, among others.
\(^b\) Based on an interview with Ron Testa, vice-president of strategy, GCash in July 2020.
\(^d\) Bank cash-ins refer to the transferring of funds from existing bank accounts, over-the-counter stations, and remittance partners to a user’s GCash account.

Sources: Authors and ADB (2021).

need for interagency coordination is in data privacy rules where the technical domain expertise of privacy and technology agencies will help inform decisions on which specific instruments are feasible for implementation.

Given the pronounced cross-border dimension of digital platforms, multilateral cooperation is crucial in strengthening competition laws, in setting policies, and in improving the capacities of regulatory agencies. Cross-country competition cooperation is vital in regulating standards and in enforcing rules on data privacy, trade protection, industrial policies, and taxation, among other areas. Likewise, cooperation helps mitigate unwanted consequences of policy changes on the investment climate and innovation,
as well as adversarial counter measures. Additionally, national authorities in the region, with diverse experiences in handling digital economy issues, can benefit from working closely. They can also adapt elements of best practices from countries that have already dealt with similar issues that they are facing.

![Figure 7.3: Supporting Policies and Regulations in the Digital Economy](source: Bernabe (2020)).

### 7.5. A Short Case Study on Digital Payments

#### State of Play and Policy Issues

Digital payment platform activity is growing rapidly around the world. For example, in 2019 an estimated 2.1 billion people used e-wallets, from just 500 million in 2017 (de Sartiges et al. 2020). Digital payment flows have three main components: (i) the initial source of funds (e.g., traditional or mobile bank or trading platform for financial assets), (ii) the payment option (e.g., digital wallet, which can be a bank wallet or a third-party wallet, or credit/debit
card), and (iii) the payment network that allows movement of funds from one digital wallet to another or to a bank account. Identifying the nodes in the digital payment transaction flow (Figure 7.4) is important in viewing the competition landscape.

Recent trends indicate that while some payment platforms focus solely on payment services, others that started in other service segments have developed their own payment solutions within their platforms. In Asia, e-commerce platforms like Lazada and Shopee have developed their own e-wallets and payment networks to facilitate transactions on their platforms. However, their e-wallets cannot be used outside the home platform. In comparison, GrabPay’s e-wallet allows payment for purchases outside the home platform, similar to Alipay, WeChat Pay, Paytm, KakaoPay, GCash, and PayMaya.

Several jurisdictions have recognized the importance of digital payment platforms in improving financial access of consumers. Given the complex ecosystem surrounding digital payments, various policies and regulations have been adopted to maximize the benefits from digital payment platforms while also addressing concerns such as privacy. Two main policy thrusts have been pursued to promote the expansion of digital payments: those relating to data privacy and management and those relating to interoperability.

**Figure 7.4: Digital Payment Transaction Flow**

MPOS = mobile point of sale, NFC = near-field communication, QR = quick response.
Source: Vergne and van Beusekom (2018).
Data privacy and security are key to increasing adoption of financial technologies. Collaboration between the public and private sectors is necessary not only to increase adoption, but also to ensure that fundamental privacy rights are protected. Some of the most well-known examples of data privacy and security rules are the EU’s GDPR and Payment Services Directive, and the US Consumer Financial Protection Bureau’s Consumer Protection Principles for Data Sharing. Asian economies have also started adopting their own data security rules, such as the PRC’s cybersecurity laws and Malaysia’s personal data protection laws, which incorporate many principles outlined in the GDPR.

To preserve the benefits of network effects while promoting innovation through competition, policies that ensure interoperability among several systems have been adopted. Examples of this include the United Kingdom’s Open Banking Initiative, the Hong Kong Monetary Authority’s Open API Framework, and the Monetary Authority of Singapore’s API Playbook.

The challenge in designing a coherent and pro-competitive data access policy is to enable the market to take full advantage of inherent network effects in digital platforms while ensuring that entry barriers stemming from control of data by a few players are minimized if not eliminated.

**Digital Payments and the National ID System in the Philippines**

Cash remains the preferred mode of transaction in the Philippines, although the COVID-19 pandemic has helped accelerate the use of digital payments. According to the Bangko Sentral ng Pilipinas (2019) Financial Inclusion Survey, 75% of public sector and 88% of private sector workers are still largely paid in cash. Trust is an issue, and a recurring theme in several jurisdictions’ efforts to increase competition and expand access to banking and financial services is to create a high-trust ecosystem. Trust is a bilateral concern—customers must be able to trust service providers to keep their data secure, while service providers must be able to manage risks through an ability to verify customer identity.

One requirement of know-your-customer processes followed by banks and other financial institutions is valid ID from potential clients. This requirement is a common problem for many Filipinos without valid ID. Lacking ID and other personal documents, many Filipinos are left unbanked
and with little to no ability to access financial services. This issue came to the fore during the COVID-19 pandemic, as digital payment service providers saw a surge in transaction volume and new user registration.\(^5\) Most new users were technology-savvy millennials who already had bank accounts, but with limited intake of customers from the unbanked and underserved demographic.

The implementation of a national ID system is intended to significantly facilitate affordable and widespread access to financial services (i.e., fund transfers, remittances, payments) by increasing convenience and compliance with valid ID requirements. A valid ID for most, if not all, Filipinos will allow them to create a digital identity which they can use to access other digital services. A national ID system is indeed promising, but its benefits rely on the ability of the market to establish and operationalize a system in which any data generated and stored remains private, secure, and customer-centric.\(^6\)

### 7.6. Conclusion

With digital platforms still evolving in many economies in Asia and the Pacific, competition is uneven across countries and sectors. Traditional factors continue to influence competition among digital platforms. Factors such as network effects, multisidedness, and agility in adopting innovative practices and business models, as well as mergers and stake acquisitions, are pressing concerns. The collection and use of big data are another prominent issue. Data are utilized to ward off competitors. In some cases, data transferability is a material determinant of switching costs, stifling competition.

In regulating digital platforms, competition authorities need to work closely with other policy-setting and regulatory agencies to ensure that rules are complementary and consistent with each other. Promoting competition in digital platforms fundamentally necessitates appropriate and relevant competition policy and effective regional cooperation frameworks as well as well-defined and actionable consumer protection and data privacy rules.

\(^5\) Based on an interview with Jonathan Bates and Krhizzy Pasigan of GrabPay Philippines in July 2020; and with Ron Testa of GCash in July 2020.

\(^6\) Customer-centric in the context of a data ecosystem is a broad term referring to rules and practices that put customers at the forefront in terms of accuracy, transparency, access, security, and rights (e.g., consent, right to be forgotten, ability to dispute, etc.), among others.
Under-enforcement due to a lack of understanding and outdated tools will have adverse consequences, and government intervention will become increasingly difficult if digital platforms continue to become more concentrated and dominant companies become too powerful to regulate. On the other hand, over-enforcement will stifle innovation and suppress value creation resulting from network effects and scale economies. Competition authorities need to decisively update analytical and regulatory instruments that balance promotion of competition while continuing to reap the benefits of digital platforms.
References


